

In the Claims:

1-37. (canceled)

38. (new) A digital wireless mobile communications device, comprising:

A. an antenna for receiving analog, direct sequence spread spectrum wireless signals;

B. analog circuitry having an input connected to the antenna and having an analog signal output;

C. analog-to-digital converter circuitry having an input connected to the analog signal output and having a digital signal output;

D. communications bus leads connected to the digital signal output;

E. memory circuitry connected to the communications bus leads and providing storage locations;

F. unit control circuitry having inputs and outputs connected to the communications bus leads, the unit control circuitry writing into partitioned memory storage locations groups of independent hypothesis information, one group for each partitioned memory storage location, and reading from each partitioned storage location a result of detection of direct sequence spread spectrum wireless signals; and

G. searcher circuitry connected to the communications bus leads, the searcher circuitry including:

i. search engine circuitry of a certain number of independent correlators, in which the certain number is two or more;

ii. hypothesis generator circuitry coupled to the communications bus leads and to the correlators, the hypothesis generator

circuitry reading each of the groups of independent hypothesis information from the memory circuitry and supplying an independent hypotheses to each of the independent correlators, the number of hypotheses read from the memory and supplied to the correlators being equal to or less than the certain number;

iii. sequence generator circuitry coupled to the hypothesis generator circuitry and the correlators, and receiving the hypotheses from the hypothesis generator and supplying a pseudo-random number sequence to each of the correlators;

iv. control information storage locations, one for each correlator, coupled to the correlators;

v. scratch memory storage locations, one for each correlator, coupled to the correlators; and

vi. result processor circuitry coupled to and receiving a result from each correlator, the result processor circuitry testing an accumulation of the results from the correlators against a threshold, and storing at a partitioned storage location in the memory an accumulated result exceeding the threshold.

39. (new) A process of detecting direct sequence spread spectrum wireless signals in a digital wireless mobile communications device, comprising:

A. receiving direct sequence spread spectrum wireless signals in an antenna;

B. converting the signals into digital information;

C. placing groups of independent hypotheses in partitioned portions of a memory with a mobile control unit with one independent hypothesis in each partitioned portion of the memory;

D. operating search circuitry to:

i. read the groups of independent hypotheses from the memory;

ii. generate a pseudo-random number from each hypothesis;

and

iii. operate correlator circuits using the independent hypotheses, pseudo-random numbers and digital information to produce results of detections, including operating the correlator circuits in parallel, each correlator circuit using one hypothesis, one pseudo-random number, and one portion of the digital information together with one control information storage space, and one scratch memory storage space;

E. testing accumulations of the results against a threshold; and

F. placing an accumulated result that exceeds the threshold in a partitioned portion of the memory corresponding to a hypothesis that produced the result.